

ADA019262

SDCS-ER-75- 32

1

SPECIAL DATA COLLECTION SYSTEM EVENT REPORT
Eastern Kazakh, 07 August 1975

J.R.Woolson, D.D.Solari, M.S.Dawkins, K.J.Hill, and R.J.Markle
Alexandria Laboratories ✓

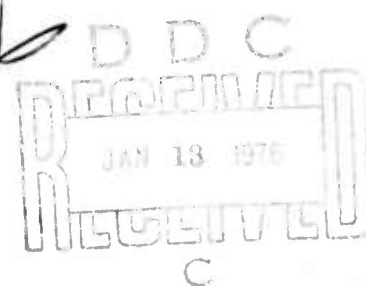
Teledyne Geotech, 314 Montgomery Street, Alexandria, Virginia 22314

October 1975

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405601

VB

SDCS Event Report No. 32

Eastern Kazakh, 7 August 1975

This event report contains seismic data from the Special Data Collection System (SDCS), and other sources for the above event. Published epicenter information from seismic observations is:

	Origin Time	Latitude	Longitude	m_b	M_s
NORSAR	03:56:47	49.1N	079.6E	5.0	N/A
Hagfors Array, Sweden	03:57:10	50 N	076 E	5.4	3.7

Using SDCS stations, LASA and NORSAR, the epicenter location and magnitudes become

03:57:00	50.0N	078.0E	5.0	N/A
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Short-period signals associated with this event were recorded at all SDCS stations, LASA and NORSAR.

Analysis of SDCS and LASA long-period data failed to produce recognizable signals associated with this event. The LP system at RK-ON was inoperative due to maintenance following instrument relocation in a new vault. At HN-ME, the vertical instrument was inoperative. The horizontal instruments exhibited principally non-seismic motion. A similar effect occurred on the north-south channel at CPSO. The east-west instrument at CPSO was inoperative.

Horizontal long-period data at HN-ME and CPSO was not rotated to radial and transverse to this event location.

Long-period array data from ALPA and NORSAR was not recoverable.

Scaling factors on plots are millimicrons at 1 Hz (not corrected for instrument response) with the exception of NORSAR short-period plots. Scaling factors are not reported for NORSAR short-period.

STATION DESCRIPTION

SITE CODE	LOCATION	SITE COORDINATES		ELEVATION METERS	INSTRUMENTATION	
		DEG	MN SECS		SHORT - PERIOD	LONG - PERIOD
ALPA	Alaska	65 14	00.0 N 147 44 36.0 W	626	None	31300
CPSO	McMinnville, Tennessee	35 35	41.4 N 085 34 13.5 W	574	6480 V 7515 H	SL210 V SL220 H
FN-WV	Franklin, West Virginia	38 32	58.0 N 079 30 47.0 W	910	KS36000	KS36000
LASA	Billings, Montana	46 41	19.0 N 106 13 20.0 W	744	HS10	7505A V 8700C H
HN-ME	Houlton, Maine	46 09	43.0 N 067 59 09.0 W	213	18300	SL210 V SL220 H
NORSAR	Kjeller, Norway	60 49	25.4 N 010 49 56.5 E	379	HS10	7505A V 8700C H
RK-ON	Red Lake, Ontario	50 50	20.0 N 093 40 20.0 W	366	18300	SL210 V SL220 H
WH2YK	White Horse, Yukon	60 41	41.0 N 134 58 02.0 W	853	18300	SL210 V SL220 H

Note: The orientation of the radial instruments at FN-WV is assumed to be $316^\circ \pm 5^\circ$ based on empirical data (event recordings). Rotation, where performed, is referenced to this azimuth and may be questionable.

HYPOCENTER DETERMINATION

INPUT FOR EVENT 7 AUG 75
03:57:00.0 49.000N 78.000E 0KM.

STA.	ARRIVAL	RESIDUALS		DIST.	AZ.
		CALC	REST		
NAC	04 04 18.7	-0.1	-0.1	38.0	312.8
WH2YK	04 07 50.8	0.1	0.0	66.5	17.0
RK-CN	04 09 06.5	-0.4	-0.3	79.3	354.6
HN-ME	04 09 10.1	0.4	0.5	79.8	336.7
IAC	04 09 30.1	0.2	0.2	83.7	2.9
FN-WV	04 09 59.6	0.3	0.3	89.7	342.6
CFC	04 10 17.0	-0.5	-0.6	93.6	346.7

67 HERRIN TRAVEL TIME TABLES

ORIGIN	LAT.	LCNG.	DEPTH (KM)	SDV	IT	STA
03:56:48.0	49.616N	78.144E	-67. CALC	0.4	10	7
03:57:00.5	49.972N	78.010E	0. REST	0.4	3	7

CALC
4 . 2
1 . 0
0 0.0 0
0
0 0.0 0
0 . 0
0 . 0

REST
4 . 2
1 . 0
0 0.0 0
0
0 0.0 0
0 . 0
0 . 0

CHI2 COVERAGE ELLIPSE: 95 PER CENT CONF..LEVEL, SDV= 0.92
MAJOR 164.8KM. MINOR 40.7KM. AZ= 179 AREA= 21067 SQ.KM. REST

DATA SUMMARY

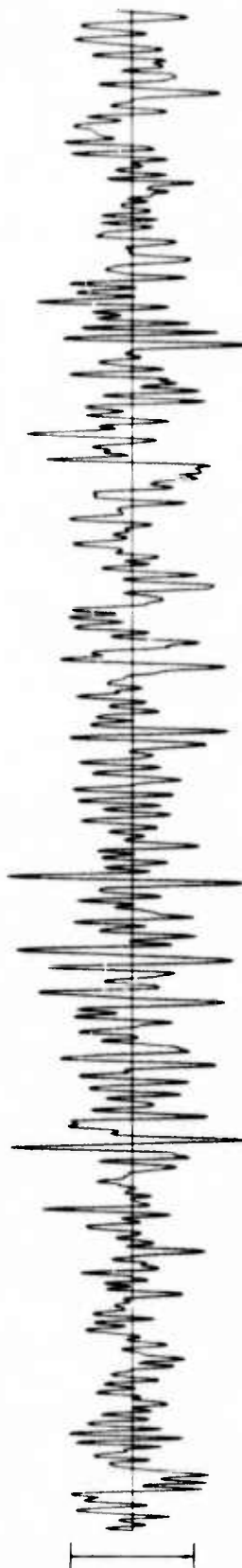
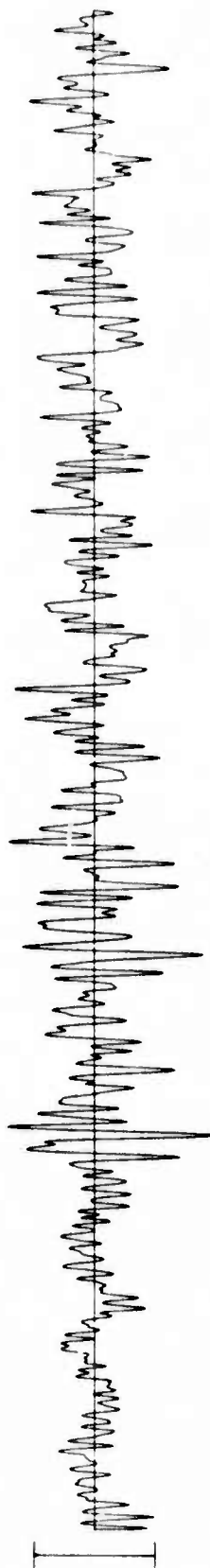
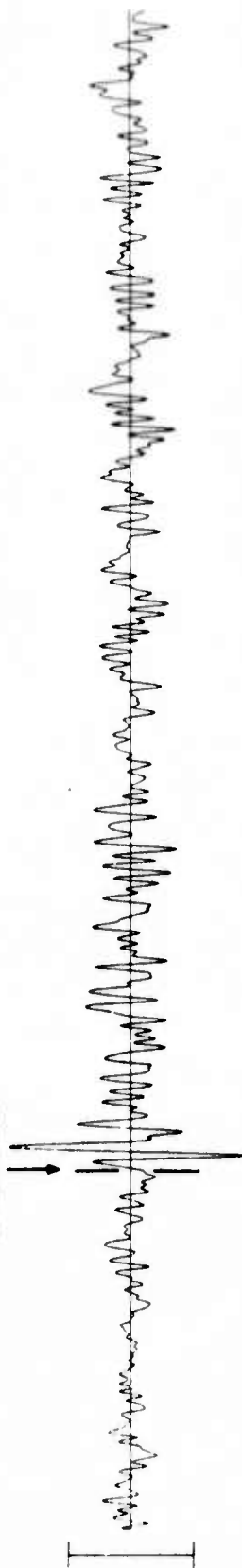
INPUT FOR EVENT 7 AUG 75
03:57:00.0 49.000N 78.000E 0KM.

STA.	PHASE	ARRIVAL		INST	FER	A/T	MAGNITUDE		DIR	DIST
		TIME					MB	M ^s		
NAC	EP	04 04 18.7		AF	0.5	28.	4.65			38.0
WH2YK	EP	04 07 50.8		SPZ	0.6	37.	5.27			66.5
RK-CN	EP	04 09 06.5		SPZ	0.4	33.	4.99			79.3
HN-ME	EP	04 09 10.1		SPZ	0.5	10.	4.42			79.8
LAC	EP	04 09 30.1		AG	0.7	44.	5.34			82.7
FN-WV	EP	04 09 59.6		SPZ	0.7	11.	4.74			89.7
CFC	EP	04 10 17.0		SPZ	0.8	24.	5.22			93.6

ORIGIN	LAT.	LCNG.	DEPTH (KM)	MAG	SDV	STA
03:56:48.0	49.616N	78.144E	0. CALC	4.93	0.35	7
03:57:00.5	49.972N	78.010E	0. REST	4.95	0.35	7

WH2YK 7 AUG 75

04:07:50.8



TIME



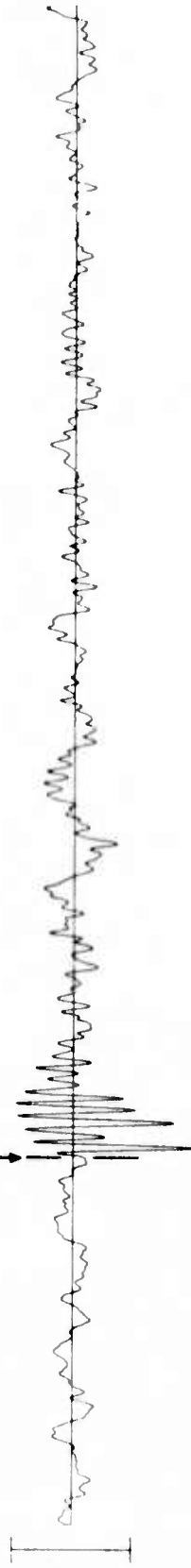
10 SEC

04:08:00

RK-ON 7 AUG 75

**SPZ
41.05 Mμ**

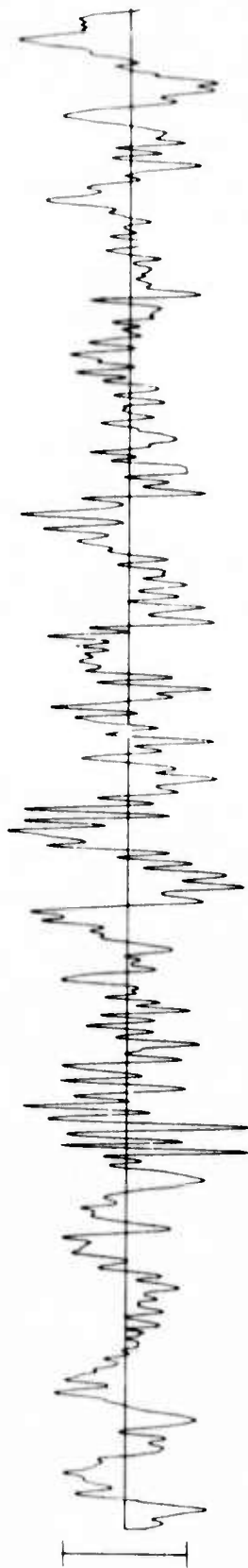
04:09:06.5



**SPR
10.09 Mμ**



**SPT
12.05 Mμ**



TIME

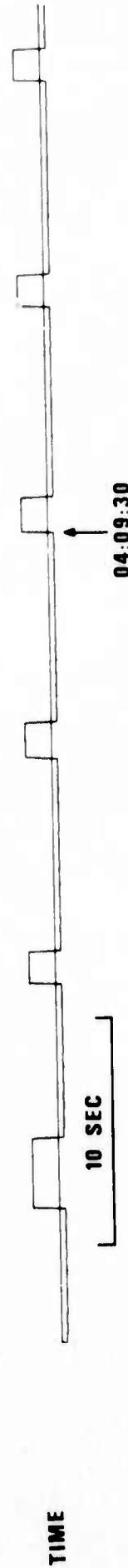
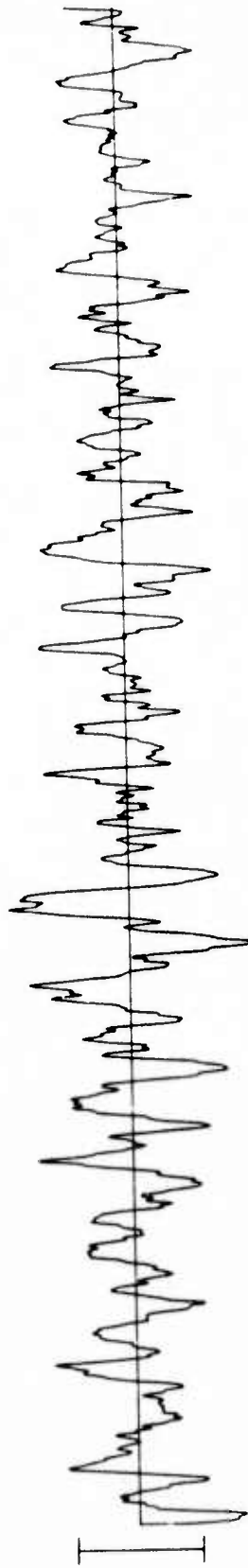
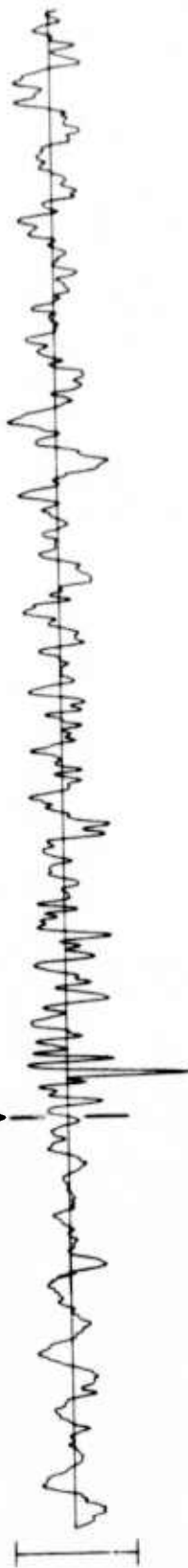


10 SEC

04:09:20

HN-ME 7 AUG 75

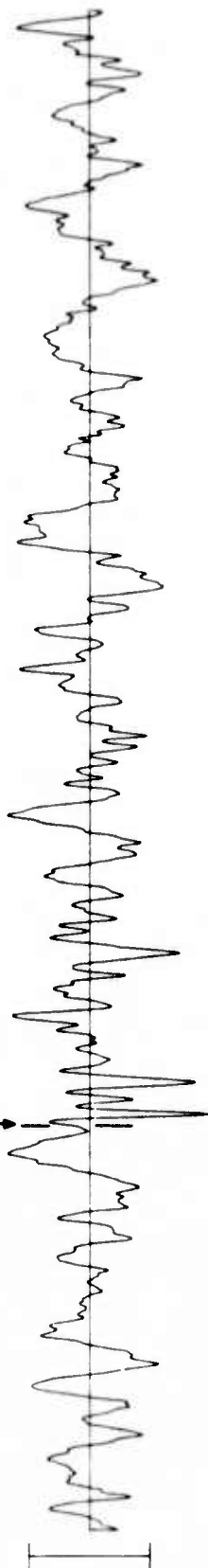
04:09:10.1



FN-WV 7 AUG 75

**SPZ
10.42 Mp**

04:09:59.6



**SPR
8.33 Mp**



**SPT
11.00 Mp**



TIME



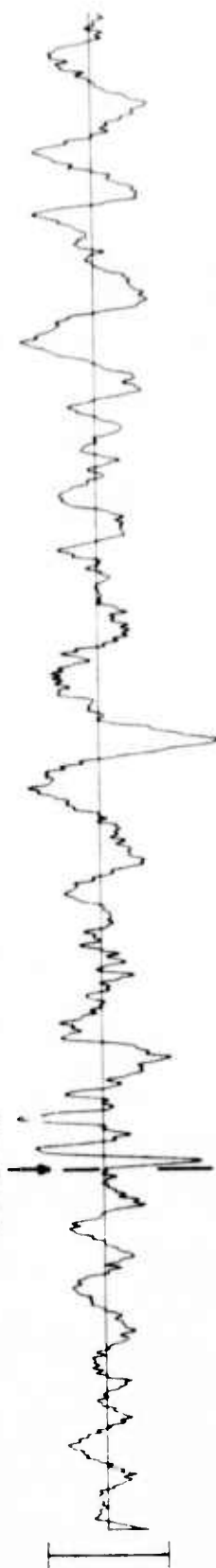
04:10:10

10 SEC

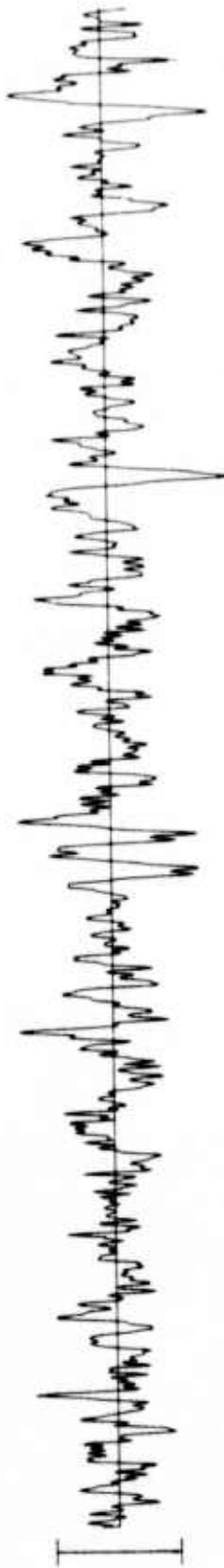
CP-S0 7 AUG 75

SPZ
18.84 Mμ

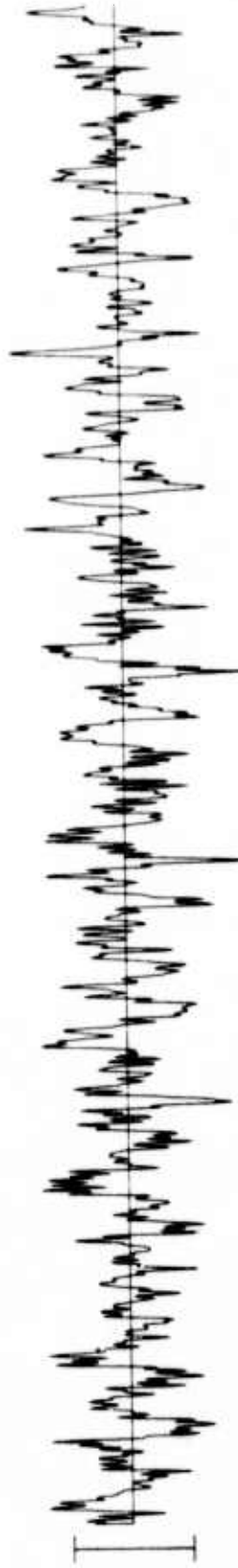
04:10:17.0



SPR
4.42 Mμ



SPT
4.62 Mμ



TIME

10 SEC

04:10:30



NORSAR EVENT FILE

1975 AUG 7

EPX NO. 94410 ARR. 04:04:18.3 49.1N 079.6E 5.0 MB -OKM

DIST = 83.7 AZI = 356.8 AMP = 11.8 PER = 0.4

— = 5 SECONDS

AB

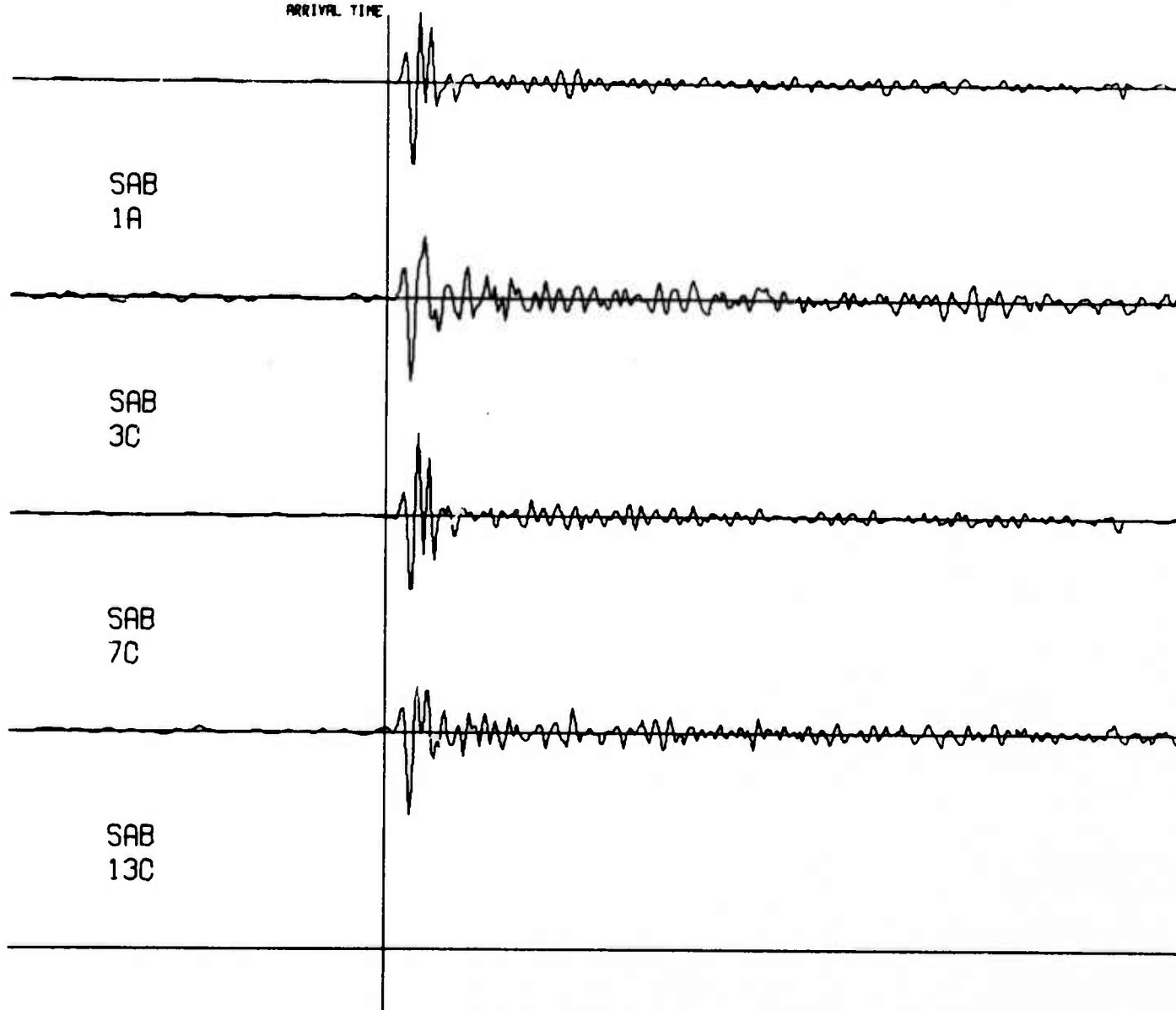
ARRIVAL TIME

SAB
1A

SAB
3C

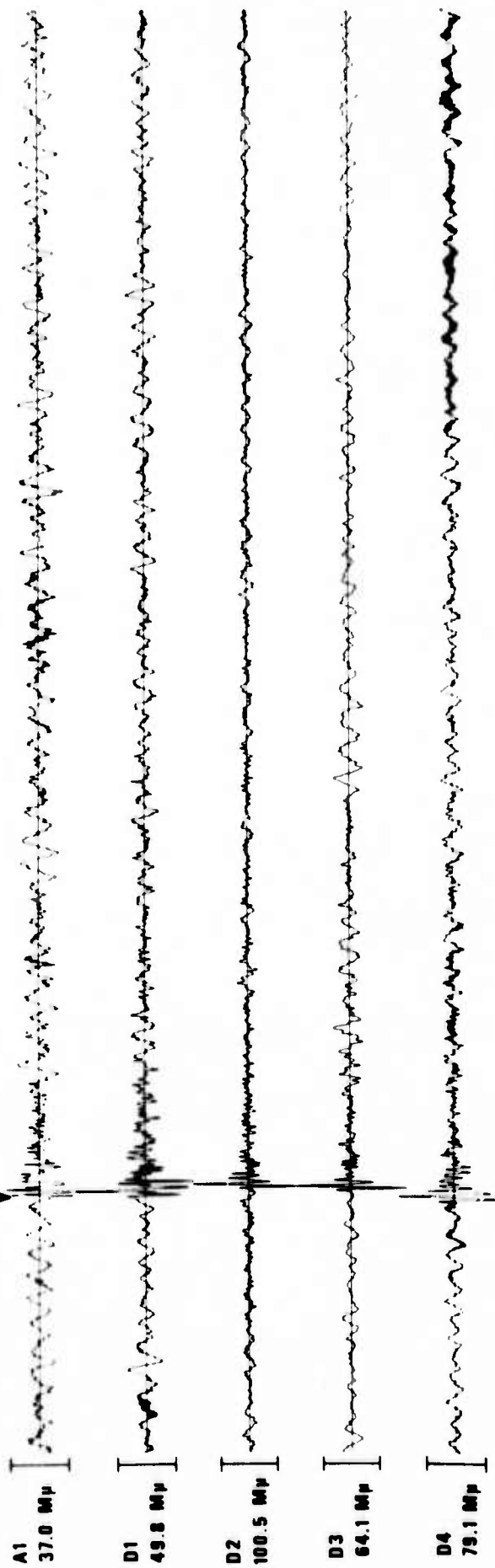
SAB
7C

SAB
13C



LASA INFINITE VELOCITY SUBARRAY SUMS 07 AUG 75

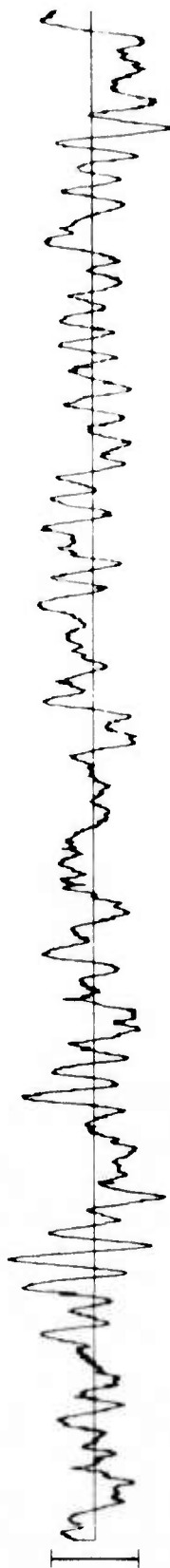
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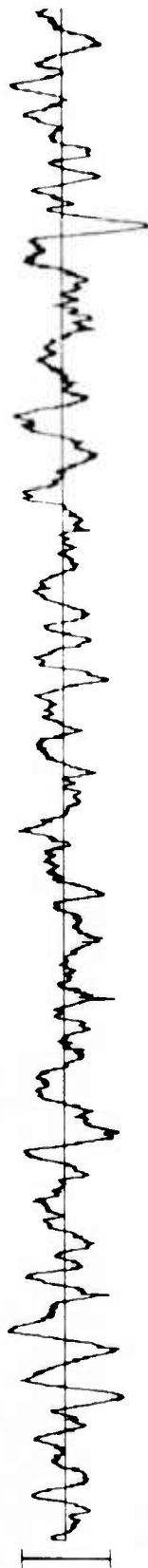
20 SEC

WH2YK 7 AUG 75

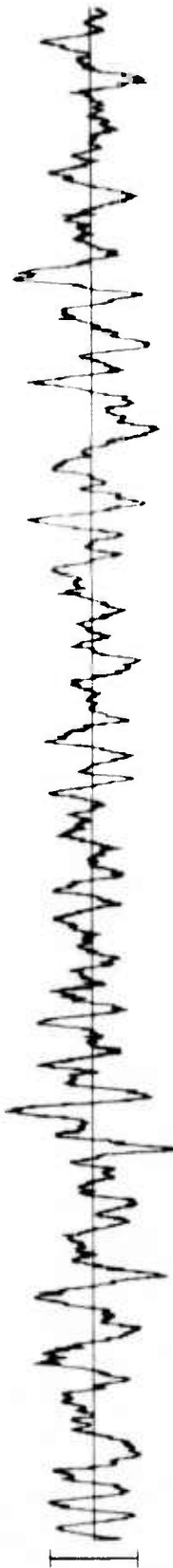
LPZ
89.44 MP



LPR
83.72 MP



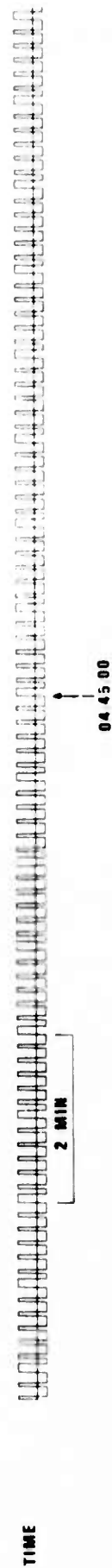
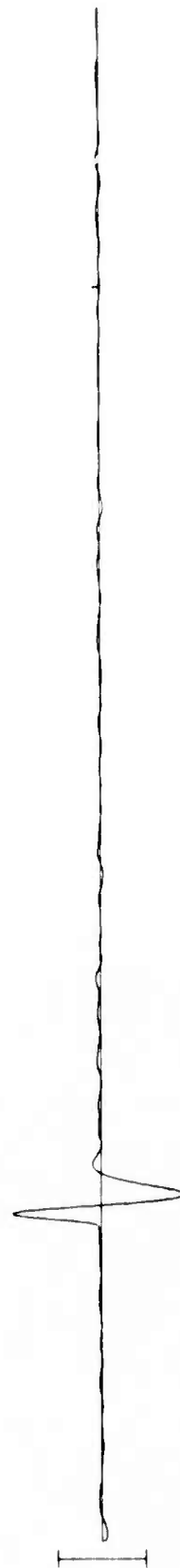
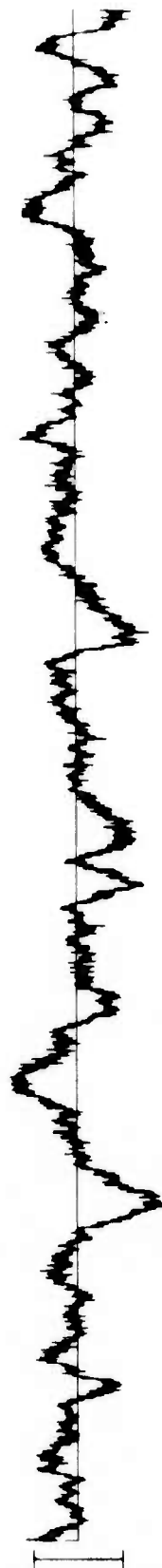
LPT
43.83 MP



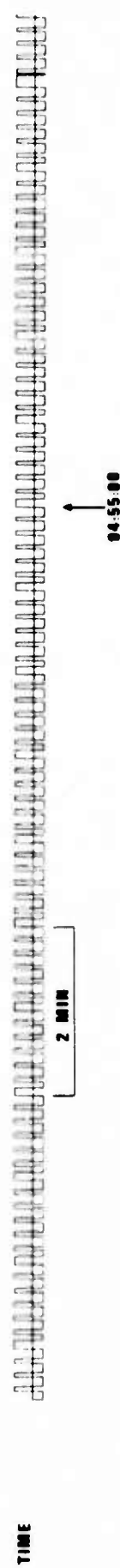
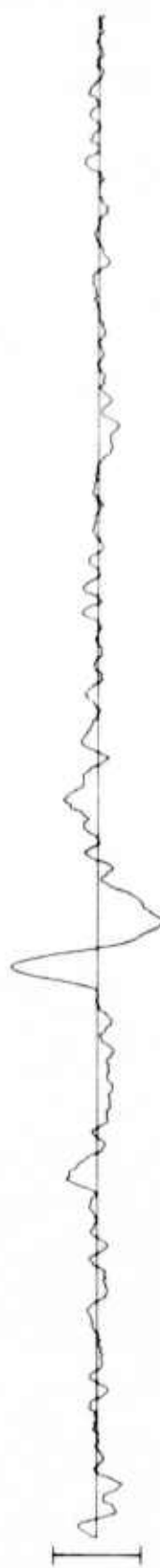
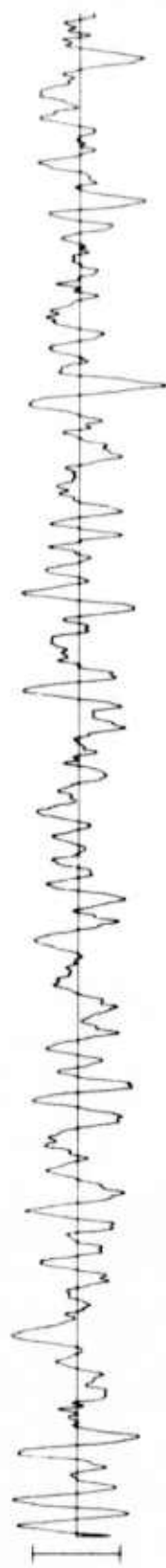
TIME



HN-ME 7 AUG 75



FN-WV 7 AUG 75



CP-S0 7 AUG 75

LPZ
90.62 Mp



LPM
979.90 Mp



LPE
21.00 Mp



TIME



2 MIN

04:56:00

LASA C4 SUBARRAY 07 AUG 75

